

connected to a cathode, the cathode separated from an anode by a vacuum space, the cathode including a diamond microtip emitter, comprising:

enhancing band bending potential of the structure during construction of the cathode and anode structure.

58. The method of claim 54, further comprising:

providing a gate electrodes during construction, the gate electrode adapted to reduce the required voltage for field emission within the structure.

#### REMARKS

Claims 1-26 have been canceled and renumbered as Claims 27-55 to correct a sequential numbering problem. Thus, 29 claims are pending in the application. The claims are otherwise unchanged.

The Commissioner is authorized to charge any deficiency or credit any overpayment associated with the filing of this Preliminary Amendment to Deposit Account 23-0035.

Respectfully submitted,



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